

REMARKS

The comments of the Applicant below are each preceded by related comments of the Examiner (in small, bold type).

4. In regards to claim 1, Edwards discloses the limitations of an active matrix display device comprising a row and column array of picture elements [0001], sets of row and column address conductors for selecting rows of picture elements (fig. 1 18 and 19) and providing data signals to the picture elements of a selected row respectively (fig. 1 25 and 21), drive means for supplying selection signals and multi-bit digital data signals [0002] respectively to the set of row address conductors and the set of column address conductors (fig. 7 18 and 19), in which the multi-bit digital data signals supplied to the column address conductors are converted into analogue voltage [0001-0003, 0006] levels for use by the picture elements by a plurality of serial charge redistribution digital to analogue conversion means [0003, 0009-0012], each conversion means comprising at least first and second capacitances interconnectable by at least one conversion switch (fig. 7 (31A and 31 B)) and between which charge is shared, and in which the first and second capacitances of a conversion means are provided by the capacitances of two column address conductors [0021-0028]

Edwards differs from the claimed invention in that Edwards does not expressly disclose wherein the picture elements in a column are of the same colour and adjacent columns of picture elements are of different colours, and wherein the first and second capacitances of a digital to analogue conversion means comprise column address conductors associated with the same colour of picture elements.

However, Park teaches a system and method wherein picture elements in a column are of the same colour and adjacent columns of picture elements are of different colours (fig. 3A 81 is R and adjacent in 82 G), (col. 3, lines 13-37 of Parks).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Edwards such that the picture elements in a column are of the same colour and adjacent columns of picture elements are of different colours as taught by Parks in order to drive a color display with reduced power consumption, since each column of color can be addressed together, as stated in (col. 2, lines 22-45 of Park) and to decrease circuit complexity for ease of manufacturing.

Therefore, Edwards as modified by Park teaches and wherein the first and second capacitances of a digital to analogue conversion means (fig. 7 31A and B, 19, 18 [001-003] Edwards) comprise column address conductors associated with the same colour of picture elements (fig. 3A 81 is R and adjacent in 82 G, col. 3, lines 13-37 of Parks).

Edwards and Park do not disclose and would not have made obvious "the first and second capacitances of a digital to analogue conversion means comprise two column address conductors that are both associated with the same colour of picture elements," as recited in amended claim 1.

The Examiner contends that the limitation "wherein the first and second capacitances of a digital to analog conversion means comprise column address conductors associated with the

same color of picture elements,” as recited in the original claim 1, is met by FIG. 3A and column 3, lines 13-37 of Park, which discloses a column S1 of red pixels, a column S2 of green pixels, and a column S3 of blue pixels. The Examiner appears to contend that “column address conductors associated with the same color of picture elements” covers examples in which a first column address conductor is associated with a first color (e.g., red) of picture elements, and a second column address conductor is associated with a second color (e.g., green) of picture elements. Applicant has amended claim 1 to clarify that the first and second capacitances of a digital to analogue conversion means comprise two column address conductors that are “both” associated with the same colour of picture elements.

A person of ordinary skill in the art, when applying the techniques of arranging color pixels as taught by Park to the digital to analog conversion scheme of Edwards, would have arranged the pixel elements 12 in the display panel 10 of Edwards to have columns of red, green, and blue pixel elements 12 (as taught by Park), and use the capacitances provided by two adjacent column address conductors (as shown in FIG. 7 of Edwards) to perform digital to analog conversion. In this case, each of the two adjacent column address conductors would be associated with a column of pixel elements 12 of the same color, but the first column address conductor would be associated with pixel elements of a color (e.g., red) that is different from the color (e.g., green) with which the second column address conductor is associated. Therefore, the combination of Edwards and Park would not have made obvious “wherein the first and second capacitances of a digital to analogue conversion means comprise two column address conductors that are both associated with the same colour of picture elements,” as recited in claim 1.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any

Applicant : Martin J. Edwards
Serial No. : 10/567,068
Filed : February 3, 2006
Page : 6 of 6

Attorney Docket: 14509-0138US1 / P080486SEXLUS

circumstance in which the applicant has amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: July 1, 2009 _____

/Rex I. Huang/ _____
Rex I. Huang
Reg. No. 57,661

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (877) 769-7945

22217113.doc